

What is claimed is:

1. A lithium ion secondary battery comprising:
a positive electrode having a positive electrode
collector and a positive electrode active material layer formed
on said positive electrode collector;

a negative electrode having a negative electrode collector and a negative electrode active material layer formed on said negative electrode collector;

a separator which is arranged between said positive electrode and negative electrode and keeps a lithium ion-containing electrolytic solution; and

a porous adhesive resin layer which bonds said positive electrode active material layer and said negative electrode active material layer to said separator and keeps said electrolytic solution to mutually connect said positive electrode, separator and negative electrode electrically.

- 2. The lithium ion secondary battery according to claim 1 wherein hole ratio of said porous adhesive resin layer is equal to or larger than that of the separator.
- 3. The lithium ion secondary battery according to claim 2 wherein hole ratio of said porous adhesive resin layer is more than 35%.

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1 4. The lithium ion secondary battery according to claim aN 1 wherein the ionic conduction resistivity of said adhesive resin 2 3 layer in which the electrolytic solution is kept is equal to or 4 lower than the ionic conduction resistivity of said separator in 5

which the electrolytic solution is kept.

negative electrode collector.

1 5. The lithium ion secondary battery according claim 1 wherein a bonding strength between the positive electrode active 2 3 material layer and the separator is equal to or larger than the 4 bonding strength between said positive electrode active material 5 layer and the positive electrode collector, and the bonding 6پ strength between the negative electrode active material layer and 7 said separator is equal to or larger than the bonding strength 8 between said negative electrode active material layer and the

1 6. The lithium ion secondary battery according to claim 1 wherein the adhesive resin layer is made of a fluoride resin 2 3 or a mixture which comprises a fluoride resin as the main 4 component.

1 7. The lithium ion secondary battery according to claim 2 6 wherein the fluoride resin is polyvinylidene fluoride.

> 8. Amethod of fabr cating a lithium ion secondary battery,

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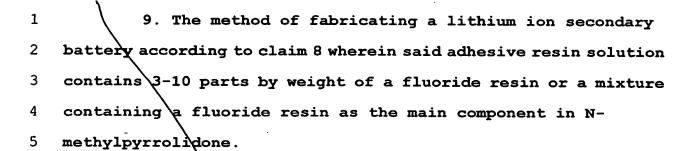
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to said laminated body.





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2	comprising the steps of:
3	preparing a positive electrode by forming a positive
4	electrode active material layer on a positive electrode
5	collector;
6	preparing a negative electrode by forming a negative
7	electrode active material layer on a negative electrode
8	collector;
9	preparing\an adhesive resin solution, by dispersing a
10	fluoride resin or a mixture containing a fluoride resin as the
11	main component in N-methylpyrrolidone;
12	coating said adhesive resin solution to at least one of
13	the surface of the positive electrode active material layer and
14	the facing surface of the separator and to at least one of the
15	surface of the negative electrode active material layer and the
16	facing surface of the separator;
17	fitting the positive electrode active material layer and
18	the negative electrode active material layer upon respective
19	surfaces of said separator;
20	evaporating said N-methylpyrrolidone from said adhesive
21	resin solution to form porous adhesive resin layers so as to bond
22	the positive electrode active material layer and the negative
23	electrode active material layer upon respective surfaces of said
24	separator to form a laminated body; and
25	supplying a lithium ion-containing electrolytic solution
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- 1 10. The method of fabricating a lithium ion secondary
 2 battery according to claim 8 wherein said step of evaporating
 3 comprises a step of heating.
- 1 11. The method of fabricating a lithium ion secondary
 2 battery according to claim & wherein said step of coating
 3 comprises a step of coating by using a bar coator.
- 1 12. The method of fabricating a lithium ion secondary
 2 battery according to claim 8 wherein said step of coating
 3 comprises a step of coating by using a spray gun.
- 1 13. The method of fabricating a lithium ion secondary
 2 battery according to claim 8 wherein said step of coating
 3 comprises a step of dipping the separator in an emulsified
 4 solution of the adhesive resin and then pulling it up.

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